MINUTES OF A SPECIAL MEETING OF THE GRANTSVILLE CITY COUNCIL HELD ON MARCH 5, 2008 AT THE GRANTSVILLE CITY HALL, 429 EAST MAIN STREET, GRANTSVILLE, UTAH. THE MEETING BEGAN AT 6:05 P.M.

**Mayor and Council Members Present:** Mayor Anderson; Council Members Tom Tripp, Brent Marshall, Todd Castagno, and Mike Johnson. Council Member Paul Rupp was excused.

**Appointed Officers and Employees Present:** Attorney Ron Elton, Recorder Jeremy Walker and Records Administrator Rachel Wright.

Citizens and Guests Present: Craig Neeley and Scott Rogers were present representing Aqua Engineering.

The special meeting was officially called to order at 6:05 p.m. by Mayor Anderson **AGENDA:** 

## **Proposed Wastewater Treatment Facility:**

Scott Rogers representing Aqua Engineering spoke to the council regarding several options for a new wastewater treatment facility. Mr. Rogers stated there are many alternatives to expand the Grantsville Wastewater Treatment facility. He stated he went over design parameters and is looking to accommodate the City's growth through the year 2030. He estimated that the population would be around 17,000 people in 2030.

Mr. Rogers discussed five different options for Grantsville's wastewater treatment:

- 1. The first option Mr. Rogers described was the ATLAS IS system. He stated the ATLAS is a system that you can put miniature clarifiers in a pond and achieve a chemical plant action within a pond system. He stated that the ATLAS is the least expensive of all of the options. He stated it is simple to use, but does require more energy to run. He stated that the ATLAS is the only option that will not produce type 1 reuse water. This system will only clean the water for type 2 reuse. He stated that type one reuse is reuse you can put back on lawns and allows human contact. Type two reuse is water you can irrigate nonfood crops with.
- 2. The second option Mr. Rogers described was the STM Aerotor. He stated it is German technology. He stated that round wheels attached to a drive, creates a slow turning action to aerate and mix the tank. The system grows bacteria on plates and results in low ammonia concentrations. He stated that with a digester, the byproducts can put on agriculture land for nonfood crops. He stated the STM Aerotor produces type one reusable water. He stated the system is low energy, but the installation cost is higher. He stated the system is easy to operate and that Grantsville City can use the existing sewer ponds as winter storage.
- 3. The third option Mr. Rogers described was the Membrane (MBR) System. He stated that this system consists of flat plates that have water sucked through them forming layers of bio-solids. He stated that the water comes through bacteria free. He stated that the system will disinfect viruses that come through the system and that it has great technology for getting phosphorus out. The system produces type one reusable water. He stated that the water looks like drinking water. He stated that the MBR system is the most expensive to build, but is very easy to operate. He stated that you do not operate the Membrane system you just maintain the equipment. He also stated that it is the easiest to upgrade.
- 4. The fourth option Mr. Rogers described was the Aquarius MSABP. He stated the Aquarius is a new technology. He stated that with the Aquarius MSABP there isn't any clarifier or sludge. He stated the Aquarius is a true cannibal system. Mr. Rogers stated that the system produces type one reusable water. He stated the system is very clean and that the operation and maintenance is low because there is not any waste sludge. He stated the system has low energy consumption comparable to a regular oxidation ditch. He stated there is one negative to this system in that it a filter to be placed on the back end and cannot be backwashed back into the plant, it would need to be backwashed into one of the ponds.
- 5. The fifth option Mr. Rogers described was the Pall Aria system. Mr. Rogers stated the Pall Aria is also a new technology. He stated the system has a microfiltration pressurized membrane. He stated that dirty lakes have been used in the Pall Aria system and they have produced clean enough water to drink. He stated the backwash would have to go back to the first cell. He stated the price is good and it produces type one reusable water. He stated that it is high in energy use. He stated that it would be easy to upgrade.

Councilman Castagno asked Mr. Rogers which system he would recommend. He stated that if the Tooele Valley Regional Sewer Plant would be constructed, he would recommend the Atlus system because it is easy to install and inexpensive. He stated the Atlus system could be built to get the City by for five to ten years. He stated he believes it will take five to ten years for the Regional Sewer Plant to be constructed. Mr. Rogers recommended the Pall Aria system if the Regional CCM 03-05-08 Special Meeting

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Sewer Plant did not go through. He recommended the next step for the Mayor and the Council would be to look at the City finances. He suggested that the Council review the current and proposed rates and impact fees and attempt to determine if the Regional Sewer Plant would be constructed.

Rates of the Alternatives Present and Future Costs presented by Aqua Engineering to the Council:

ALTERNATIVES	INITIAL CAPITAL COSTS	ANNUAL O&M COSTS	20-YR PRESENT VALUE O&M COST	PRESENT VALUE LIFE CYCLE COSTS
ATLAS IS	\$5,098,732.00	\$267,996.00	\$4,131,544.00	\$9,230,276.00
STM Aerotor	\$9,129,722.00	\$262,605.00	\$4,048,435.00	\$13,178,157.00
Membrane (MBR)	\$10,123,657.00	\$388,776.00	\$6,426,772.00	\$16,550,429.00
Aquarius MSABP	\$9,654,595.00	\$235,569.00	\$3,631,643.00	\$13,286,238.00
Pall Aria	\$5,404,181.00	\$299,034.00	\$4,610,052.00	\$10,014,234.00

The attached information was also provided to the Council by Aqua Engineering and is incorporated by reference into these minutes.

Mayor Anderson closed the special meeting at 7:00 p.s	m.
Jeremy A. Walker	C. Byron Anderson
Recorder	Mayor